Natural and Social Science Program Overview

Introduction

Shenandoah National Park has a long history of supporting both natural science and social science programs and activities. Park staff members have traditionally been involved in management and monitoring activities while scientists from other agencies and from universities have been involved in research projects. These have ranged from intensive investigations of bear movements and behaviors and documentation of acid deposition effects to less complex and demanding studies like brief searches for gall forming wasps. Shenandoah is fortunate to have a cadre of scientists who are interested in the park and the multiple issues the National Park Service faces.
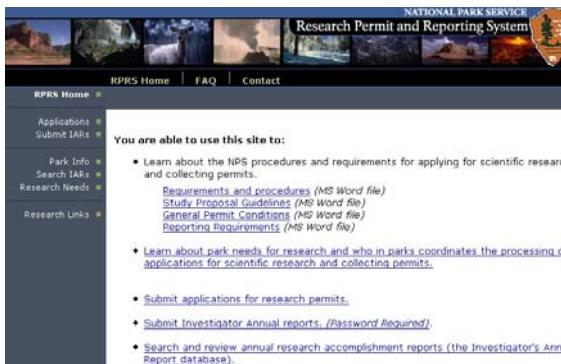
Management Needs

Sometimes park staff does not fully understand a natural resource problem or does not know the best way to resolve a particular issue. In those cases, support is sought from the academic world and other agencies and organizations to conduct research targeted on those issues. Furthermore, parks are ideal locations for research to be conducted because resource conditions are generally good or pristine and land use is not changing rapidly. Significant numbers of scientists approach the park each year with interests in conducting research in the park. Thus, the National Park Service supports an active research program.

Each year park staff members process between 20 and 30 applications to conduct research in the park. This is handled through the Research Permit and Reporting System, a web- based application and reporting system. In recent years, greater emphasis has been placed on obtaining better quality research proposals and on reporting. This is being done to assure that there is better documentation of natural resource and sociological information.

Shenandoah is able to offer a number of services to cooperating scientists including access to data, digital map products, limited office space, a natural resource library, and the Pinnacles Research Facility. Pinnacles is a single building with bunk, meal preparation, common, and laboratory space located just off of Skyline Drive in the heart of the park.

Research projects conducted in the park tend to be evenly split between projects that directly address specific management needs and those that are not directly related to those needs. Furthermore, the overwhelming majority of projects focus on the natural sciences with relatively few dealing with the social sciences. Despite the light treatment of social sciences and the number of projects that are unrelated directly to management needs, the staff at Shenandoah has always been successful at obtaining funding for and/or interest in the most critical issues that need scientific investigation. As is true with most parks, a list of science needs is always under development.

Research Permit and Reporting System (RPRS) - Service wide on-line system.

University researchers conducting a 3D cliff mapping project in the park.

Current Status

To date, documentation of nearly 400 projects conducted in Shenandoah National Park has been found. Efforts are ongoing to find and organize the data, reports, and other documentation associated with these projects. Tools are also being developed that will aid park staff in retrieving this information once it is stored.